

## AMENDMENTS TO THE CLAIMS

Please amend claims 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, and 88 as follows.

1-43 (canceled)

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44. (Currently Amended) A signal transmission apparatus for transmitting a first data stream and a second data stream, said signal transmission apparatus comprising:

a modulator operable to modulate the first data stream according to an m-level PSK and modulate the second data stream according to an n-level PSK to produce modulated signals;

an inverse Fast Fourier Transformer (IFFT) operable to convert the modulated signals into an IFFT converted signal; and

a transmitter operable to transmit the IFFT converted signal;

wherein the first data stream has an interval data for demodulating the modulated signals corresponding to the second data stream ~~information of the value of n.~~

45. (Previously Presented) A signal transmission apparatus according to claim 44, wherein m is less than or equal to 4.

46. (Previously Presented) A signal transmission apparatus according to claim 44, wherein n is greater than or equal to 4.

47. (Previously Presented) A signal transmission apparatus according to claim 44, wherein m is less than or equal to 4 and n is greater than or equal to 4.

48. (Currently Amended) A signal transmission apparatus for transmitting a first data stream and a second data stream, said signal transmission apparatus comprising:

a modulator operable to modulate the first data stream according to an m-level QAM and modulate the second data stream according to an n-level QAM to produce modulated signals;

an inverse Fast Fourier Transformer (IFFT) operable to convert the modulated signals into an